



Port Health Department.

I. Amount of Shipping Entering the Port during the
Year 1937.

Shipping In all 3170 vessels (apart from those engaged in the fishing trade) arrived from foreign and coastwise, the tonnage amounting to 8,027,785.

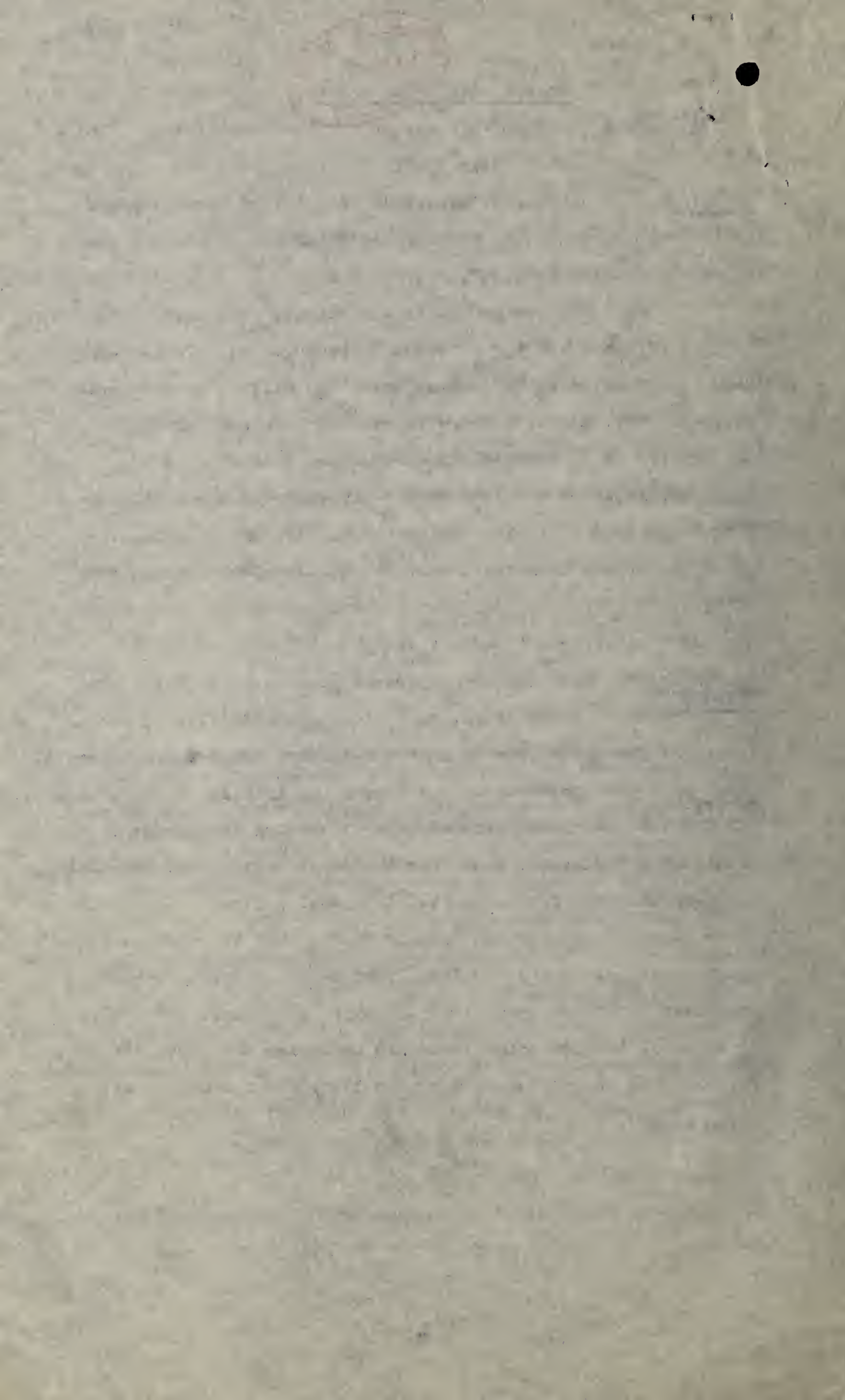
Four hundred and fifty six vessels were visited by the Medical Officers and 1,809 by the Inspector. 104 defects were found on 49 vessels and in most cases the defects were remedied while in Port. In cases where it was not possible for renovation and repairs to be carried out during the vessels' stay at Plymouth, a letter was sent to the Inspector at the next port of call in England notifying him of the details of our notice. In all 5 letters were sent. Further details will be found in Table A.

II. Character of Trade of Port.

Passenger Traffic The number of persons passing through the Port was over 33,256 including 15,363 aliens, the latter figure being made up in the main part by American tourists.

Cargo Traffic Coastwise. Coastwise cargo traffic consists largely of transhipped general cargoes from London, Liverpool and Glasgow, coal from the North East Ports, and coal and general goods from the Bristol Channel Ports.

Foreign. The foreign trade remained much the same as in previous years. Vessels arriving from infected ports were given immediate attention by officers of this Department. Table B (b) gives a list of the chief steamship companies and ports with which Plymouth has traded during the year 1937, and the nature of any cargo traded.



III. Source of Water Supply.

(a) For the Port.

Great Western Docks.

Plymouth Corporation Water
Department from hydrants
on the wharves.

Cattedown & Sutton Harbour.

(b) For Shipping. The only water boat supplying fresh water to shipping in the Port is the Ela, of 5,500 gallons capacity.

(c) Number of Water Boats and Sanitary Condition. For shipping, water is derived from the hydrants on the wharves or from the Ela. The tanks of the Ela were inspected periodically throughout the year and were found to be in a wholesome condition.

IV. Port Sanitary Regulations 1933.

(1) Arrangements for dealing with Declarations of Health.

(2) Boarding of vessels on Arrival.

(3) Notification of the Authority of inward vessels requiring Special Attention.

(4) Mooring stations designated under Article 10.

(5) Particulars of any standing exemptions from the provisions of Article 14.

(6) Experience of working of Article 16.

(7) Arrangements made for:-

(a) Premises and waiting-room for medical examination.

(b) Cleansing and disinfection of ships, persons and clothing and other articles.

(c) Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations.

(d) Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.

(e) Ambulance transport.

(f) Supervision of contacts.

(8) Arrangements for the bacteriological or pathological examination of rats for plague.

(9) Arrangements for other bacteriological or pathological examinations.

(10) Arrangements for the diagnosis and treatment of venereal disease among sailors under the international arrangements.

(11) Arrangements for the interment of the dead.

(12) Other matters.

All the above remain the same as set forth in the Annual Report for the year 1933.

Dear Sir:

I have a pleasure in

acknowledging the receipt of your letter of the 10th inst.

and in reply to inform you that the same has been forwarded to the

proper authorities for their consideration.

I am, Sir, very respectfully,

Yours very truly,

W. H. Cresson

Chief of Bureau

(1) The enclosed report of the

entomologist in charge of the

investigation of the pest of the

citrus fruit is herewith

transmitted to you for your

information and for the use of

the various departments of the

Government.

(2) The report of the entomologist

in charge of the investigation of

the pest of the cotton plant is

also herewith transmitted to you

for your information and for the

use of the various departments of

the Government.

(3) The report of the entomologist

in charge of the investigation of

the pest of the sugarcane plant

is also herewith transmitted to

you for your information and for

the use of the various departments

of the Government.

CASES OF INFECTIOUS DISEASES DEALT WITH
DURING THE YEAR
1927.

	Number of Cases Investigated			Totals	
	Disposed of during voyage	Landed at Fly-mouth	Pro-ceeded in ship	Passengers	Crew
Scarlet Fever	6	-	1	7	-
Enteric Fever	7	-	4	3	2
Pneumonia	-	1	4	2	3
Dysentery	3	-	2	5	-
Erysipelas	-	-	3	1	2
Pulmonary Tuberculosis	1	11	36	46	2
Tuberculosis Other Forms	-	-	1	1	-
Malaria	1	-	12	3	10
Chicken Pox	9	1	5	11	4
Measles	7	-	11	17	1
Venereal Disease	4	-	29	11	22
Influenza	-	1	1	1	1
Mumps	2	1	6	8	1
Whooping Cough	-	-	3	3	-
Leprosy	-	-	1	1	-
	40	15	119	120	54

THE LATEST REPORTS OF THE
 OFFICE OF THE
 SECRETARY OF THE ARMY
 1890

GENERAL		DETAILS OF SERVICE			REMARKS
NAME	REGIMENT	COMPANY	GRADE	DATE	
1	7	2	1	1	First Lieutenant
2	8	3	2	2	Second Lieutenant
3	9	4	3	3	Third Lieutenant
4	10	5	4	4	Fourth Lieutenant
5	11	6	5	5	Fifth Lieutenant
6	12	7	6	6	Sixth Lieutenant
7	13	8	7	7	Seventh Lieutenant
8	14	9	8	8	Eighth Lieutenant
9	15	10	9	9	Ninth Lieutenant
10	16	11	10	10	Tenth Lieutenant
11	17	12	11	11	Eleventh Lieutenant
12	18	13	12	12	Twelfth Lieutenant
13	19	14	13	13	Thirteenth Lieutenant
14	20	15	14	14	Fourteenth Lieutenant
15	21	16	15	15	Fifteenth Lieutenant
16	22	17	16	16	Sixteenth Lieutenant
17	23	18	17	17	Seventeenth Lieutenant
18	24	19	18	18	Eighteenth Lieutenant
19	25	20	19	19	Nineteenth Lieutenant
20	26	21	20	20	Twentieth Lieutenant
21	27	22	21	21	Twenty-first Lieutenant
22	28	23	22	22	Twenty-second Lieutenant
23	29	24	23	23	Twenty-third Lieutenant
24	30	25	24	24	Twenty-fourth Lieutenant
25	31	26	25	25	Twenty-fifth Lieutenant
26	32	27	26	26	Twenty-sixth Lieutenant
27	33	28	27	27	Twenty-seventh Lieutenant
28	34	29	28	28	Twenty-eighth Lieutenant
29	35	30	29	29	Twenty-ninth Lieutenant
30	36	31	30	30	Thirtieth Lieutenant
31	37	32	31	31	Thirty-first Lieutenant
32	38	33	32	32	Thirty-second Lieutenant
33	39	34	33	33	Thirty-third Lieutenant
34	40	35	34	34	Thirty-fourth Lieutenant
35	41	36	35	35	Thirty-fifth Lieutenant
36	42	37	36	36	Thirty-sixth Lieutenant
37	43	38	37	37	Thirty-seventh Lieutenant
38	44	39	38	38	Thirty-eighth Lieutenant
39	45	40	39	39	Thirty-ninth Lieutenant
40	46	41	40	40	Fortieth Lieutenant
41	47	42	41	41	Forty-first Lieutenant
42	48	43	42	42	Forty-second Lieutenant
43	49	44	43	43	Forty-third Lieutenant
44	50	45	44	44	Forty-fourth Lieutenant
45	51	46	45	45	Forty-fifth Lieutenant
46	52	47	46	46	Forty-sixth Lieutenant
47	53	48	47	47	Forty-seventh Lieutenant
48	54	49	48	48	Forty-eighth Lieutenant
49	55	50	49	49	Forty-ninth Lieutenant
50	56	51	50	50	Fiftieth Lieutenant
51	57	52	51	51	Fifty-first Lieutenant
52	58	53	52	52	Fifty-second Lieutenant
53	59	54	53	53	Fifty-third Lieutenant
54	60	55	54	54	Fifty-fourth Lieutenant
55	61	56	55	55	Fifty-fifth Lieutenant
56	62	57	56	56	Fifty-sixth Lieutenant
57	63	58	57	57	Fifty-seventh Lieutenant
58	64	59	58	58	Fifty-eighth Lieutenant
59	65	60	59	59	Fifty-ninth Lieutenant
60	66	61	60	60	Sixtieth Lieutenant
61	67	62	61	61	Sixty-first Lieutenant
62	68	63	62	62	Sixty-second Lieutenant
63	69	64	63	63	Sixty-third Lieutenant
64	70	65	64	64	Sixty-fourth Lieutenant
65	71	66	65	65	Sixty-fifth Lieutenant
66	72	67	66	66	Sixty-sixth Lieutenant
67	73	68	67	67	Sixty-seventh Lieutenant
68	74	69	68	68	Sixty-eighth Lieutenant
69	75	70	69	69	Sixty-ninth Lieutenant
70	76	71	70	70	Seventieth Lieutenant
71	77	72	71	71	Seventy-first Lieutenant
72	78	73	72	72	Seventy-second Lieutenant
73	79	74	73	73	Seventy-third Lieutenant
74	80	75	74	74	Seventy-fourth Lieutenant
75	81	76	75	75	Seventy-fifth Lieutenant
76	82	77	76	76	Seventy-sixth Lieutenant
77	83	78	77	77	Seventy-seventh Lieutenant
78	84	79	78	78	Seventy-eighth Lieutenant
79	85	80	79	79	Seventy-ninth Lieutenant
80	86	81	80	80	Eightieth Lieutenant
81	87	82	81	81	Eighty-first Lieutenant
82	88	83	82	82	Eighty-second Lieutenant
83	89	84	83	83	Eighty-third Lieutenant
84	90	85	84	84	Eighty-fourth Lieutenant
85	91	86	85	85	Eighty-fifth Lieutenant
86	92	87	86	86	Eighty-sixth Lieutenant
87	93	88	87	87	Eighty-seventh Lieutenant
88	94	89	88	88	Eighty-eighth Lieutenant
89	95	90	89	89	Eighty-ninth Lieutenant
90	96	91	90	90	Ninetieth Lieutenant
91	97	92	91	91	Ninety-first Lieutenant
92	98	93	92	92	Ninety-second Lieutenant
93	99	94	93	93	Ninety-third Lieutenant
94	100	95	94	94	Ninety-fourth Lieutenant
95	101	96	95	95	Ninety-fifth Lieutenant
96	102	97	96	96	Ninety-sixth Lieutenant
97	103	98	97	97	Ninety-seventh Lieutenant
98	104	99	98	98	Ninety-eighth Lieutenant
99	105	100	99	99	Ninety-ninth Lieutenant
100	106	101	100	100	Hundredth Lieutenant

Medical Work

- (1) Staff nurse for the treatment of minor ailments
- (2) Dispensing of medicine to patients
- (3) Examination of patients
- (4) Examination of patients
- (5) Examination of patients

The number of aliens landed at this port under the Aliens Order 1920. during the year was 15,363 in addition to 72 alien seamen, all of whom were either medically examined or inspected: 161 were subjected to detailed examination for various reasons, but it was not necessary to refuse permission to land in any case. Those staying over three months were treated as immigrants and subjected to more careful medical examination, so that no alien should be permitted to land, who, by reason of physical or mental infirmity might become a burden or charge on the community.

Further details will be found in Part II of the Report.

Medical Board
General Reg
Illness Order
1948.

The number of illness recorded at this point
during the year 1948 is 11,000 in relation to
the illness recorded, all of which were minor
relatively speaking as compared with 1947 when
the number of illness recorded was 12,000, and it
was not necessary to record patients in 1948 in any way.
These figures were taken from the records of the hospital and
subjected to some medical investigation, so that an
idea would be obtained as to the, 1948, by reason of hospital
as medical investigation might become a factor in the case of the

community.

V. Measures against Rodents.

- (1) Steps taken for the detection of rodent plague.
- (2) Measures taken to prevent the passage of rats between the ships and the shore.
- (3) Methods of deratisation of (a) Ships, and (b) Premises in the vicinity of docks or quays.
- (4) Measures taken for the detection of rat prevalence in ships and on shore.
- (5) Rat proofing.

The measures taken under all the above headings remain the same as set out in the Annual Report for the year 1933.

Plague Precautions were carried out on 82 vessels arriving from plague infected or suspected ports and suitable measures taken to prevent rats from leaving or gaining access to the ship.

1 Deratisation Certificate and 36 Deratisation Exemption Certificates were issued. In certain cases a month's extension was granted and the ships were allowed to proceed for fumigation either at their home ports or next port of loading. In each case the appropriate authority was notified. The contractors' prices for fumigation appear to be relatively high at Plymouth and ships are reluctant to undergo fumigation because of the cost.

Further details will be found in Tables E to H.

1. The first finding is that the data are consistent with the hypothesis that the system is a simple linear system.

2. The second finding is that the data are consistent with the hypothesis that the system is a simple linear system.

3. The third finding is that the data are consistent with the hypothesis that the system is a simple linear system.

4. The fourth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

5. The fifth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

6. The sixth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

7. The seventh finding is that the data are consistent with the hypothesis that the system is a simple linear system.

8. The eighth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

9. The ninth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

10. The tenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

11. The eleventh finding is that the data are consistent with the hypothesis that the system is a simple linear system.

12. The twelfth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

13. The thirteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

14. The fourteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

15. The fifteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

16. The sixteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

17. The seventeenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

18. The eighteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

19. The nineteenth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

20. The twentieth finding is that the data are consistent with the hypothesis that the system is a simple linear system.

REPORT ON THE RAT-FLEAS OF PLYMOUTH

by R.B. Mayfield. M.D.
(formerly Asst. M.O.H. Plymouth)

This investigation began in May 1935 and ended in May 1937. The object was to gain some idea of the species and numbers of fleas harboured by the rats which inhabit the Plymouth docks. The total number of rats examined for fleas was eighty three, seventy seven of these being caught on the docks and the remaining six in the town of Plymouth.

Technique

Only live rats, trapped singly, were used in this survey. The cage containing the rat was placed in a white calico bag, and the whole enclosed in a wooden box together with a rag soaked in chloroform. After a suitable interval had elapsed, the bag containing the caged rat was removed from the box, and the fleas collected by thoroughly combing the rat and searching the bag.

Results.

(A) Rats Caught on Dock Premises.

The total number of rats investigated in this area was seventy seven, consisting of sixty three *Rattus norvegicus* and fourteen *Rattus rattus*. Two of the former species and one of the latter were immature specimens.

Three species of rat-flea were found on the docks, *Nosopsyllus* (*Ceratophyllus*) *fasciatus*, *Xenopsylla cheopis*, and *Leptopsylla segnis* (*musculi*).

(a) *Rattus norvegicus*. Table I shows the total numbers of each species of flea found on adult brown rats during the period of the investigation, together with the average numbers of fleas per rat. Here and subsequently "F" denotes "number of fleas", and "F/R" denotes number of fleas per rat.

TABLE I

Species of flea	F	F/R	<u>Number of rats = 61</u>
<u>X. cheopis</u>	171	2.8	
<u>N. fasciatus</u>	352	5.8	
<u>L. segnis</u>	79	1.3	
<u>Total fleas</u>	602	9.9	

U.S. District Court
Southern District of New York

THE FOLLOWING INFORMATION WAS OBTAINED FROM THE RECORDS OF THE FBI:

The object was to make some idea of the species and number of
fish occurring in the lake which inhabit the riverine zone.
The total number of fish examined for this was thirty three,
twenty seven of these being caught on the shore and the remaining
six in the boat of fishermen.

0-1-1-1-1

Only five rats, trapped almost, were used in this country. The cage containing the rat was placed in a white cloth bag, and the whole enclosed in a wooden box. The rat was killed in alcohol. After a while, the rat was placed in a glass container, and the rat was covered from the top, and the glass container was covered by a wooden box. The rat was covered by a wooden box, and the glass container was covered by a wooden box.

THE UNIVERSITY OF CHICAGO

The total number of cells investigated in this area was
seventy seven, consisting of sixty three normal cells and
fourteen abnormal cells. Two of the abnormal cells are of the
leucocyte type and the remaining twelve are of the
epithelial type.

Other sections of material were found on the same, non-specific
(epithelial) material, showing the same type of
cells (leucocytes).

(a) Yellow-bellied Sapsucker. Table I shows the total numbers of

1 2572

4.5	4	1017 10 20 10 10 10
5.5	5	1017 10 20 10 10 10
6.5	6	1017 10 20 10 10 10
7.5	7	1017 10 20 10 10 10
8.5	8	1017 10 20 10 10 10
9.5	9	1017 10 20 10 10 10
10.5	10	1017 10 20 10 10 10

Table II shows the average numbers of fleas per rat in quarterly periods of the year, the rats dealt with here being the same as in Table I. It should be noted that the second quarter in 1935 does not include April, and the second quarter in 1937 does not include June.

TABLE II.

	1935				1936			1937	
Quarter of year	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
<i>X. cheopis</i>	13.0	4.0	4.5	0.7	1.1	0.0	1.0	1.1	0.3
<i>N. fasciatus</i>	6.0	9.0	5.0	7.0	4.0	8.3	2.0	7.6	5.7
<i>L. segnis</i>	3.8	1.5	0.4	0.7	0.5	5.3	2.8	0.3	0.7
Total fleas	22.8	14.5	9.8	8.5	5.6	13.7	5.8	9.9	9.5
Number of rats	6	2	11	11	11	3	5	9	3

Table II does not reveal any seasonal variation in the numbers per rat of any of the three species of flea encountered, though this may be because the numbers of rats are too small. A noticeable feature is the sharp fall in the incidence of *X. cheopis*, but it must be borne in mind that the rat-flea population of a port is liable to sudden increases due to immigration.

It is interesting to note that 96% of the *X. cheopis* taken of brown rats on the docks came from a single grain warehouse, and the remaining 4% from within two hundred yards of these premises. This flea is not, of course, a native of this country, but is imported from warmer climates. It has been found plentifully in the Ports of Liverpool and Cardiff in recent years, at Bristol (1916), and at Guy's Hospital (1911). A single specimen was taken from a brown rat at Plymouth in 1905.

(b) Rattus rattus. The single immature *R. rattus* yielded one specimen of *N. fasciatus*. The gleanings from the thirteen adults are shown in Table III.

to 1000 feet per minute.

[illegible]

1. The first of these is the fact that the majority of the population of the United States is now living in urban areas. This is a result of the process of urbanization, which has been going on since the beginning of the 20th century. The process of urbanization is the movement of people from rural areas to urban areas. This is a result of the fact that urban areas offer more opportunities for employment and education than rural areas do. The process of urbanization has led to the growth of large cities and the decline of small towns and villages. This has had a significant impact on the way of life in the United States. The majority of the population now lives in urban areas, and this has led to a number of changes in the way of life. For example, the majority of the population now works in the service sector, and this has led to a decline in the importance of agriculture and manufacturing. The process of urbanization has also led to a decline in the importance of religion. The majority of the population now lives in urban areas, and this has led to a decline in the importance of religion. The majority of the population now lives in urban areas, and this has led to a decline in the importance of religion.

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[illegible]

TABLE III.

Species of flea	F	F/R
<i>X. cheopis</i>	7	0.5
<i>N. fasciatus</i>	50	3.9
<i>L. segnis</i>	25	1.9
Total fleas	82	6.3

Here again, the *X. cheopis* were all derived from the grain store mentioned above or its near neighbourhood.

(B) Rats Caught in the Town of Plymouth

Four *R. norvegicus* and two *R. rattus* were trapped in the town of Plymouth and examined for fleas. Between them they yielded thirty two specimens of *N. fasciatus* and three of *L. segnis*. None of these rats harboured *X. cheopis*.

Acknowledgement.

My best thanks are due to Professor P.A. Buxton of the London School of Hygiene and Tropical Medicine who very kindly checked the identifications of all the fleas collected in this survey.

TABLE III.

Species of Fish	Y	Q
<i>S. virgatus</i>	7	0.1
<i>S. virgatus</i>	10	0.1
<i>S. virgatus</i>	12	0.1
<i>S. virgatus</i>	15	0.1

These results, however, are not to be taken too literally, as the results of the different experiments are not entirely comparable.

The Effect of Temperature on the Growth of Fishes

It is well known that the growth of fishes is greatly influenced by the temperature of the water in which they live. The growth of fishes is generally more rapid at higher temperatures than at lower temperatures. The growth of fishes is also more rapid in warm water than in cold water.

Experimental Results

The following table shows the results of the experiments conducted by the author on the growth of fishes at different temperatures. The growth of fishes was measured by the length of the fish at the beginning and at the end of the experiment.

Summary.

Oysters. As mentioned in the Annual Report for 1936 the owner of the Yealm Oyster Fisheries has modified his tanks on lines suggested by this Department. Throughout the summer experiments were carried out in the newly constructed tanks in close collaboration with Professor Eyre, to whom we are indebted for the vast amount of bacteriological work he has undertaken and for his advice on numerous occasions.

The principle of the method used is that sea water will purify itself when allowed to sediment for ten to twelve days, and may then be regarded as "clean". The self-cleansing properties of the oysters are well known and if fed on clean water they will rapidly cleanse themselves.

There are three tanks arranged in parallel. The first tank (A) has a depth of 10 feet and is used for sedimentation purposes. Water is run in up to a depth of 8 ft. 6 inches - thus giving a volume of water of approximately 32,000 gallons. Water is allowed to sediment for ten to twelve days and then run into a second tank (B) to a depth of 3 feet. The volume of water in this second tank (for treatment tank) is approximately 9,000 gallons. Oysters, previously freed from gross pollution by scrubbing, are placed in a single layer on special trays, lying eighteen inches from the bottom of the tank, for a period of two days. The water is then run out of the tank and the oysters hosed with "clean" water from the sedimenting tank (A). A further 9,000 gallons of "clean" water are then transferred into the treatment tank (B) from the sedimentation tank (A) and the process repeated, making a total of four days treatment.

At the onset, treatment consisted of two periods of three days each, but this was reduced because it was found that the oysters did not function vigorously on the third day. Bacteriological examinations revealed no detriment following the reduction in time. Between two and four thousand oysters are treated in this way at a time, according to the requirements of the market.

The cleansed oysters are then placed in special storage tanks until required for market. Clean water from one of the sedimentation tanks is pumped into these tanks daily to a depth of eighteen inches.

is mentioned in the annual reports for 1935 and 1936 of the State Department. The State Department has notified the Bureau on lines suggested by this document. The Bureau's attention was directed to the fact that the Bureau is not in a position to cooperate with the Bureau in the investigation of the case of the State Department. It is suggested that the Bureau be notified of the case of the State Department.

[illegible]

the procedure of the report.

The enclosed papers are being placed in Special Agent's file.

Sincerely,
J. Edgar Hoover

The oysters are placed on special wooden trays, about nine inches from the bottom of the tank.

The third tank (C) is a larger but shallower tank which is used as a second sedimentation tank. Water is run into here to a depth of five feet giving a volume of approximately 31,500 gallons, and treated in a similar way to that in tank (A).

By the use of two sedimentation tanks it is possible to have a continuous supply of "clean" sea water for purposes of purification.

Full attention is given to details of cleanliness and all tanks are scrubbed out before being refilled.

I am pleased to report that so far the method used has been successful and that bacteriological reports have all been very satisfactory throughout the oyster season 1937-1938.

Public Health (Shellfish) Regulations, 1934.

Reference to the map on page will show that a large amount of untreated sewage is discharged into the Hamoaze and Hooe Lake. Unfortunately, a certain amount of shellfish (cockles, mussels, limpets and winkles) is collected from these places for sale, although the trade is very small and purely local. Bacteriological examination of the water showed that the layings were polluted and the shellfish were found to be unfit for human consumption. An order was made by the Council under the Public Health (Cleansing of Shellfish) Regulations, 1934 closing the following layings:- Hooe Lake; The Hamoaze including West Mud; St. John's Lake; off Torpoint Institution; Weston Mill Lake; off Rat's Island; The Mouth of the St. Germans River; off Saltash; and in the River Tamar and its Tributaries. This order became operative on December 1st, 1937.

Shellfish sold in the City of Plymouth come from the following sources:-

Cockles - King's Lynn.

Limpets - Foreshore from Mount Batten to Wembury.
Port Wrinkle, Cornwall.

Mussels - Padstow, Cornwall.

Periwinkles - Foreshore from Mount Batten to Wembury.
Port Wrinkle, Cornwall.
Padstow, Cornwall.

The species are placed in several groups, about 150

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The number of species (2) is larger for species which are

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Oysters, - Brightlingsea, Essex.
Billingsgate Market, London.
River Yealm, Steer Point.

Qoens and Escallops - Plymouth and Brixham, landed by Trawlers.
Wheelks - Plymouth, Brixham and Torbay, landed by Trawlers.

Swimming - Tinside. Prior to the opening of the Swimming Season
Pools

a Chlorination Plant was installed at the Tinside Swimming Pool. During the season 37 samples of water were taken for bacteriological examination and the results were satisfactory. The concentration of free chlorine has been kept between .1 and .4 parts per million, and there have been no serious complaints attributable to the presence of chlorine.

Mount Wise Swimming Baths. Thirteen samples were taken from No.1 basin and fifteen from No.2 basin. The results were satisfactory.

Other Swimming Places. Unfortunately, many of the sites favoured by bathers are situated in close proximity to various sewer outfalls. The map on page shows the sewer outfalls from the City which discharge into the surrounding sea and tidal rivers.

Foodstuffs. A systematic inspection of foodstuffs landed in the Port resulted in 755 vessels being visited in this connection, and nearly 39 tons of foodstuff were dealt with as being unsound, unwholesome, and otherwise unfit for human consumption. Details are given in the following table:-

FOODS CONDEMNED DURING THE YEAR, 1937.

<u>DIVISION</u>		T.	C.	Q.	LBS.	<u>DISPOSAL</u>
3. Apples	3 tins			1	9	To Incinerator
Apricots	1 tin				2	do
Apricot pulps	28 tins		3	2	0	do
Corned Beef	4 tins			1	0	do
Hams	32 tins		4	0	3	do
Pines	35 tins			1	24	do
Prunes	2 tins				10	do
Veal	38 tins		2	3	14	do
4. Apples			5	0	0	For Pigs' Food
Grapes			10	0	0	To Refuse Dump
Lemons			5	0	0	do
Oranges			15	0	0	do
Potatoes		35	0	0	0	For Pigs' Food
5. Wheat			19	2	0	For Pigs' Food
	<u>TOTAL</u>	<u>38</u>	<u>6</u>	<u>0</u>	<u>6</u>	

Two parcels of Apples were found to contain .021 and .035 grains arsenious oxide per pound. As the average permissible is .01 per pound, the apples in each case were returned to Liverpool under Guarantee for reconditioning.

1. 1/2 ton and over - 100000
 2. 1/4 ton and over - 100000
 3. 1/8 ton and over - 100000
 4. 1/16 ton and over - 100000
 5. 1/32 ton and over - 100000
 6. 1/64 ton and over - 100000
 7. 1/128 ton and over - 100000
 8. 1/256 ton and over - 100000
 9. 1/512 ton and over - 100000
 10. 1/1024 ton and over - 100000
 11. 1/2048 ton and over - 100000
 12. 1/4096 ton and over - 100000
 13. 1/8192 ton and over - 100000
 14. 1/16384 ton and over - 100000
 15. 1/32768 ton and over - 100000
 16. 1/65536 ton and over - 100000
 17. 1/131072 ton and over - 100000
 18. 1/262144 ton and over - 100000
 19. 1/524288 ton and over - 100000
 20. 1/1048576 ton and over - 100000
 21. 1/2097152 ton and over - 100000
 22. 1/4194304 ton and over - 100000
 23. 1/8388608 ton and over - 100000
 24. 1/16777216 ton and over - 100000
 25. 1/33554432 ton and over - 100000
 26. 1/67108864 ton and over - 100000
 27. 1/134217728 ton and over - 100000
 28. 1/268435456 ton and over - 100000
 29. 1/536870912 ton and over - 100000
 30. 1/1073741824 ton and over - 100000
 31. 1/2147483648 ton and over - 100000
 32. 1/4294967296 ton and over - 100000
 33. 1/8589934592 ton and over - 100000
 34. 1/17179869184 ton and over - 100000
 35. 1/34359738368 ton and over - 100000
 36. 1/68719476736 ton and over - 100000
 37. 1/137438953472 ton and over - 100000
 38. 1/274877906944 ton and over - 100000
 39. 1/549755813888 ton and over - 100000
 40. 1/1099511627776 ton and over - 100000
 41. 1/2199023255552 ton and over - 100000
 42. 1/4398046511104 ton and over - 100000
 43. 1/8796093022208 ton and over - 100000
 44. 1/17592186044416 ton and over - 100000
 45. 1/35184372088832 ton and over - 100000
 46. 1/70368744177664 ton and over - 100000
 47. 1/140737488355328 ton and over - 100000
 48. 1/281474976710656 ton and over - 100000
 49. 1/562949953421312 ton and over - 100000
 50. 1/1125899906842624 ton and over - 100000
 51. 1/2251799813685248 ton and over - 100000
 52. 1/4503599627370496 ton and over - 100000
 53. 1/9007199254740992 ton and over - 100000
 54. 1/18014398509481984 ton and over - 100000
 55. 1/36028797018963968 ton and over - 100000
 56. 1/72057594037927936 ton and over - 100000
 57. 1/144115188075855872 ton and over - 100000
 58. 1/288230376151711744 ton and over - 100000
 59. 1/576460752303423488 ton and over - 100000
 60. 1/1152921504606846976 ton and over - 100000
 61. 1/2305843009213693952 ton and over - 100000
 62. 1/4611686018427387904 ton and over - 100000
 63. 1/9223372036854775808 ton and over - 100000
 64. 1/18446744073709551616 ton and over - 100000
 65. 1/36893488147419103232 ton and over - 100000
 66. 1/73786976294838206464 ton and over - 100000
 67. 1/147573952589676412928 ton and over - 100000
 68. 1/295147905179352825856 ton and over - 100000
 69. 1/590295810358705651712 ton and over - 100000
 70. 1/1180591620717411303424 ton and over - 100000
 71. 1/2361183241434822606848 ton and over - 100000
 72. 1/4722366482869645213696 ton and over - 100000
 73. 1/9444732965739290427392 ton and over - 100000
 74. 1/18889465931478580854784 ton and over - 100000
 75. 1/37778931862957161709568 ton and over - 100000
 76. 1/75557863725914323419136 ton and over - 100000
 77. 1/151115727451828646838272 ton and over - 100000
 78. 1/302231454903657293676544 ton and over - 100000
 79. 1/604462909807314587353088 ton and over - 100000
 80. 1/1208925819614629174706176 ton and over - 100000
 81. 1/2417851639229258349412352 ton and over - 100000
 82. 1/4835703278458516698824704 ton and over - 100000
 83. 1/9671406556917033397649408 ton and over - 100000
 84. 1/19342813113834066795298816 ton and over - 100000
 85. 1/38685626227668133590597632 ton and over - 100000
 86. 1/77371252455336267181195264 ton and over - 100000
 87. 1/154742504910672534362390528 ton and over - 100000
 88. 1/309485009821345068724781056 ton and over - 100000
 89. 1/618970019642690137449562112 ton and over - 100000
 90. 1/1237940039285380274899124224 ton and over - 100000
 91. 1/2475880078570760549798248448 ton and over - 100000
 92. 1/4951760157141521099596496896 ton and over - 100000
 93. 1/9903520314283042199192993792 ton and over - 100000
 94. 1/19807040628566084398385987584 ton and over - 100000
 95. 1/39614081257132168796771975168 ton and over - 100000
 96. 1/79228162514264337593543950336 ton and over - 100000
 97. 1/158456325028528675187087900672 ton and over - 100000
 98. 1/316912650057057350374175801344 ton and over - 100000
 99. 1/633825300114114700748351602688 ton and over - 100000
 100. 1/1267650600228229401496703205376 ton and over - 100000
 101. 1/2535301200456458802993406410752 ton and over - 100000
 102. 1/5070602400912917605986812821504 ton and over - 100000
 103. 1/10141204801825835211973625643008 ton and over - 100000
 104. 1/20282409603651670423947251286016 ton and over - 100000
 105. 1/40564819207303340847894502572032 ton and over - 100000
 106. 1/81129638414606681695789005144064 ton and over - 100000
 1

Investigation first was conducted at the Texas Highway
Department - Texas. Prior to the opening of the highway season

[illegible]

From the 1st of June to the 1st of July 1941. The results are as follows:

Some of the most interesting features of the life of the people of the South Sea Islands are the various customs and habits which are peculiar to each of the numerous islands of the group. These customs and habits are the result of the influence of the various races which have inhabited the islands, and of the various conditions of the environment. The most interesting of these customs and habits are the various forms of art, the various forms of music, the various forms of dance, the various forms of religion, and the various forms of government. These customs and habits are the result of the influence of the various races which have inhabited the islands, and of the various conditions of the environment. The most interesting of these customs and habits are the various forms of art, the various forms of music, the various forms of dance, the various forms of religion, and the various forms of government.

and otherwise with the same consumption. Details are given in the
to name of commodity with date as being subject, and details
resulted in the same being visited in this connection, and details
commodity. A systematic inspection of commodity is the first

— 2 — *Find me!*

Two samples of liquid were found in western hill and one sample in eastern hill. The average concentration is 0.1 per cent. The liquid is not pure but contains some impurities.

RECORDS OF VESSELS INSPECTED, TONNAGE, CREWS, PASSENGERS, SICKNESS, ETC., FOR THE

TEN YEARS ENDED 1937.

Year	No. of Vessels Inspected	NATIONALITY		No. of Crews On Board	Registered Tonnage	Sickness		Passengers		Deaths	Landed for Treatment	HOSPITALARY	
		British	Foreign			During Voyage	Infectious	On Board	Landing			No. of Vessels	No. of Defects
1928	2,867	2,155	714	251,533	6,740,983	853	448	206,137	43,963	61	181	127	630
1929	2,261	1,781	480	248,119	6,665,530	1,224	636	215,386	47,471	71	134	105	633
1930	2,071	1,424	647	267,973	7,342,851	1,401	637	224,753	45,002	60	160	83	514
1931	1,940	1,363	577	225,010	6,612,552	1,321	776	180,265	54,744	60	106	55	212
1932	1,974	1,475	519	185,513	6,536,655	1,226	778	156,874	51,468	56	207	27	284
1933	2,032	1,542	540	215,972	6,609,646	732	694	120,016	23,234	55	85	15	94
1934	2,105	1,173	1,030	191,569	6,666,580	224	116	128,177	51,417	55	22	31	146
1935	1,980	1,445	535	154,777	5,455,850	333	276	110,963	24,834	52	14	45	183
1936	2,269	1,280	989	177,469	5,481,037	207	190	100,912	51,572	56	23	59	262
1937	2,265	1,686	579	215,372	5,735,941	187	174	107,001	33,235	50	15	49	104

